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28 S L46 AND L14

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EIFE 'HCAPLUS' ENTERED AT 18:42:42 ON 26 JUL 2000 SAVE L13 LEE381S/A SAVE L45 LEE381P2/A SAVE LAS LEERRIPOLA PAR LING MAKENING 74P Г¢б F43 STR L41 777 707 S 09 rtt STR L7 EIFE 'REGISTRY' ENTERED AT 18:38:56 ON 26 JUL 2000 L38 0 S L25 AND (L31 OR L35) LEI 0 2 FT8 WND F30 F36 0 2 L35 AND L30 F32 TEWIS ACID PST. O S PSS AND L31 E51 0 S L29 AND L31 rss 0 2 F30 AND L31 20108 S TRIFLATE OR SULFOURTE S# 2 PS8(F)@FACO2AS F30 10e S F14(F) (FS2 OK FS6 OK FS4) 627 361 S LI4 AND (L25 OR L26 OR L27) 4388 S PHOSPH?(4A)(DONAT? OR DON###) ΓSJ II1758 S PHOSPH? (4A) TRANSFER? rs₂ 66 S L14(L)(DONAT? OR DON###) 0 S L23 NOT L22 $\Gamma S3$ 27.772 PT7(7)617 S S 417 S GLYCOSYL?(4A)SUBSTRATE 617 SS8 2 FI#(F)@FACOSAFS T78 3/12/ 17/17 24 C:+cs 18/04/04 of 18/17/18 34 C:+cs ECTI2 917 SITISAL S LIBRARS OR COMBINATORS OR (SOLID(W) (PHASE OR SUPPORT OR STATE 917 HCAPLUS' ENTERED AT 18:18:04, ON 26 JUL 2000 ÐΤT 4236 da Skotterenteserenteses ab Sat **FT3** 20 S LIL SSS SAM SUB=LIO 217 TIT LI ATS And the selection of the section of SAVE L10 LEE381P/A отп 67 E3 SCKEEN 1838 VND SOTE EIFE "KEGISTRY" ENTERED AT 18:06:53 ON 26 JUL 2000 THOUSING ENTERED AT 18:01:05 ON 26 JUL 2000 85 2 ET-85 ÞΠ FIRE 'REGISTRY' ENTERED AT 18:00:43 ON 26 JUL 2000 SEFECL BN F3 1-8 8 2 FT WND FS ГЗ Γ 5 9 S PLANTE O?/AU 31 S SEEBERGER F?/AU FILE 'HCAPLUS' ENTERED AT 17:59:42 ON 26 JUL 2000 (FILE 'HOME' ENTERED AT 17:59:34 ON 26 JUL 2000) std b <=

SEARCHED BY SUSAN HANLEY 305-4053

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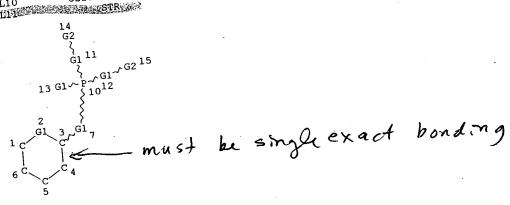
1 C G1 3 G1 7

2 Any type of bonding

VAR G1=O/S/N NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
SCR 1838 AND 2016
L8 5213 SEA FILE=REGISTRY SSS FUL L7 AND L8
L10 STR



VAR G1=O/S/N
VAR G2=H/AK/CY
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L13 4236 SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L14 8149 SEA FILE=HCAPLUS ABB=ON PLU=ON L13

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STR STR

STRUCTURE for Starting material

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NODE ATTRIBUTES:
CONNECT IS E2 RC AT 3
CONNECT IS E2 RC AT 4
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 6

NUMBER OF NODES IS O

STEREO ATTRIBUTES: NONE
L45 5539 SEA FILE=REGISTRY SSS FUL L43
L46 6272 SEA FILE=HCAPLUS ABB=ON PLU=ON L45

Inventors

=> d bib abs hitstr 15 1

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L5 ANSWERE OF A HCAPEUS COPYRIGHT 2000 ACS
 DN
      132:251369
      Combinatorial synthesis of oligosaccharide phosphates via glycosidation
 TΤ
      reaction
      Seeberger, Peter H.; Plante, Obadiah J.
      Massachusetts Institute of Technology, USA
 PΑ
      PCT Int. Appl., 92 pp.
 SO
      CODEN: PIXXD2
 DT
      Patent
      English
 LA
 FAN.CNT 1
                                             APPLICATION NO.
                                                              DATE
      PATENT NO.
                       KIND
                             DATE
                                             WO 1999-US23292 19991006
                             20000413
      WO 2000020428
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          W: CA, JP
          RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE
                       19981006
 PRAI US 1998-103291
      MARPAT 132:251369
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- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- One aspect of the present invention relates to differentially protected glycosyl phosphates in prepn. of oligosaccharide phosphates I wherein X represents O, NR1, or S; Y represents independently for each occurrence O, NR1, or S; Z represents independently for each occurrence O, NR1, or S; R is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl; R1 is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl; R2, R3, and R4 are independently selected from the group consisting of R, OR1, SR1, amine, OSO3H, OPO3H2; R5 is selected from the group consisting of R, (CR2)nOR1, (CR2)nSR1; and n is an integer selected from the range O to 10 inclusive. Another aspect of the present invention relates to the prepn. of glycosyl phosphates from glycal precursors. In another aspect of the present invention, glycosyl phosphates are used as glycosyl donors in glycosylation reactions. Thus, trisaccharide II was prepd. via glycosidation reaction with glycal.

IT 226919-62-6P 226919-63-7P 226919-64-8P 226919-65-9P 226919-67-1P 226919-68-2P 226919-72-8P 226919-78-4P 226919-79-5P 226919-81-9P 226919-83-1P 226919-84-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

RN 226919-62-6 HCAPLUS

.beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(phenylmethyl) phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-63-7 HCAPLUS
CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-64-8 HCAPLUS
CN .betá.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-65-9 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-67-1 HCAPLUS
CN .beta.-D-Glucopyranose, 6-O-[(1,1-dimethylethyl)dimethylsilyl]-,
1-(dibutyl phosphate) 2,3,4-tris(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-68-2 HCAPLUS
CN .beta.-D-Glucopyranose, 3,6-bis-O-(phenylmethyl)-4-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-galactopyranosyl}-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-72-8 HCAPLUS

CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-.beta.-D-glucopyranosyl]1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

226919-78-4 HCAPLUS RN

.alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, CN 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA

Absolute stereochemistry. Rotation (+).

RN 226919-79-5 HCAPLUS

.alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (+).

226919-81-9 HCAPLUS RN

CN

.alpha.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Absolute stereochemistry. Rotation (+).

RN 226919-84-2 HCAPLUS
CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-,
dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

H3C- CH2- SH

RN 582-52-5 HCAPLUS

CN .alpha.-D-Glucofuranose, 1,2:5,6-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 2465-65-8 HCAPLUS

CN Phosphorothioic acid, O,O-diethyl ester (8CI, 9CI) (CA INDEX NAME)

RN 4064-06-6 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 33494-81-4 HCAPLUS

CN Phosphoric acid, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

RN 40246-30-8 HCAPLUS

CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 55628-54-1 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 145852-76-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 226919-69-3 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-70-6 HCAPLUS

CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-O-(phenylmethyl)-1-thio-,
2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

RN 262436-84-0 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4,6-0-{(R)-(4-methylphenyl)methylene}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 40246-33-1P 201210-64-2P 219122-26-6P 219122-30-2P 226919-66-0P 226919-71-7P 226919-73-9P 226919-76-2P 262590-82-9P 262590-83-0P 262590-84-1P 262590-85-2P 262590-86-3P 262590-87-4P 262590-88-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

RN 40246-33-1 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-6-O-(3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 201210-64-2 HCAPLUS

CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

RN 219122-26-6 HCAPLUS

CN .alpha.-D-Galactopyranose, 6-O-{2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-trisO-(phenylmethyl)-.beta.-D-glucopyranosyl}-1,2:3,4-bis-O-(1methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 219122-30-2 HCAPLUS

CN

.alpha.-D-Glucofuranose, 3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:5,6-bis-O-(1-methylethylidene)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-66-0 HCAPLUS

Absolute stereochemistry. Rotation (-).

226919-71-7 HCAPLUS RN

.beta.-D-Glucopyranoside, methyl 2-0-(2-0-(2,2-dimethyl-1-oxopropyl)-3,4,6-CN tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-3,4,6-tris-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

226919-73-9 HCAPLUS RN

.beta.-D-Mannopyranoside, ethyl 6-0-[2-0-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-0-(phenylmethyl)-.beta.-D-glucopyranosyl]-3,4-bis-0-(phenylmethyl)-1-CN thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

226919-76-2 HCAPLUS RN

D-arabino-Hex-1-enitol, O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-CN (phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-0-2-0-(2,2-dimethyl-1oxopropyl)-3,4-bis-0-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.4)-1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME) SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry. Rotation (-).

RN 262590-82-9 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262590-83-0 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(bis(1,1-dimethylethyl)
phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262590-84-1 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

RN 262590-85-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl}-4,6-O-[(R)-(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262590-86-3 HCAPLUS

.beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.alpha.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262590-87-4 HCAPLUS

CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

RN 262590-88-5 HCAPLUS
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2-acetate 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

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L5 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2000 ACS

AN 1999:694715 HCAPLUS

DN 132:93556

TI Solid-Phase Oligosaccharide Synthesis: Preparation of Complex Structures Using a Novel Linker and Different Glycosylating Agents

AU Andrade, Rodrigo B.; Plante, Obadiah J.; Melean, Luis G.; Seeberger, Peter H.

CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA

SO Org. Lett. (1999), 1(11), 1811-1814 CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

OS CASREACT 132:93556

AB A .beta.-(1.fwdarw.4)-linked trisaccharide was prepd. in 53% yield on a polymer support using glycosyl phosphates and released by cross-metathesis of a novel linker to reveal the anomeric n-pentenyl glycoside.

Heptasaccharide was prepd. in 9% yield in 14 steps.

IT 111-78-4, 1,5-Cyclooctadiene 627-42-9, 2-Chloroethyl methyl ether 129163-12-8 172222-30-9, Grubbs' ruthenium catalyst 253683-26-0 253683-40-8D, Merrifield resin bound 253683-41-9

RL: RCT (Reactant)
 (solid phase oligosaccharide synthesis using a novel linker and
 different glycosylating agents)

RN 111-78-4 HCAPLUS

CN 1,5-Cyclooctadiene (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 627-42-9 HCAPLUS

CN Ethane, 1-chloro-2-methoxy- (9CI) (CA INDEX NAME)

С1-СН2-СН2-О-СН3

RN 129163-12-8 HCAPLUS

CN .alpha.-D-Mannopyranose, 3,4,6-tris-O-(phenylmethyl)-, 2-acetate
1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 172222-30-9 HCAPLUS

CN Ruthenium, dichloro(phenylmethylene)bis(tricyclohexylphosphine)-, (SP-5-31)- (9CI) (CA INDEX NAME)

RN 253683-26-0 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 253683-40-8 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl 3,4,6-tris-O-(phenylmethyl)-, 2-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 253683-41-9 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 62422-45-1 HCAPLUS CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 62422-45-1 HCAPLUS CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 253683-23-7 HCAPLUS
CN .alpha.-D-Mannopyranoside, (4Z)-8-(phenylmethoxy)-4-octenyl
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 253683-24-8 HCAPLUS
CN .alpha.-D-Mannopyranoside, (4Z)-8-(2-methoxyethoxy)-4-octenyl
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 253683-25-9 HCAPLUS
CN Butanal, 4-[[2-0-acetyl-3,4,6-tris-0-(phenylmethyl)-.alpha.-D-mannopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 253683-27-1 HCAPLUS

CN .beta.-D-Glucopyranoside, (42)-8-hydroxy-4-octenyl O-4-O-((1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-B

RN 253683-28-2 HCAPLUS

CN .beta.-D-Glucopyranoside, 4-pentenyl O-4-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-B

~ CH2

RN 253683-39-5 HCAPLUS 4-Octen-1-ol, 8-[bis(4-methoxyphenyl)phenylmethoxy]-, (4Z)- (9CI) (CA CN INDEX NAME)

Double bond geometry as shown.

254442-15-4 HCAPLUS RN CN

.alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-0-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 254442-16-5 HCAPLUS

.alpha.-D-Mannopyranoside, (42)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

Ph
$$R$$
 S S H O $CH_2)_3$ $CCH_2)_3$ Ph

RN 254442-17-6 HCAPLUS
CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl 0-2-0-acetyl-3,4,6SEARCHED BY SUSAN HANLEY 305-4053

tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 2-A

PAGE 3-A

143706-52-9P 253683-29-3P 253683-35-1P IT 253683-36-2P 253683-37-3P 253683-38-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)

143706-52-9 HCAPLUS RN.alpha.-D-Mannopyranoside, 4-pentenyl 0-2-0-acetyl-3,4,6-tris-0-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-0-3,4,6-tris-0-(phenylmethyl) - .alpha. -D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

253683-29-3 HCAPLUS RN .beta.-D-Glucopyranoside, 4-pentenyl 0-2-0-(2,2-dimethyl-1-oxopropyl)-3,4bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-.beta.-Dglucopyranosyl-(1.fwdarw.6)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-3,4-bis-O-(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

RN 253683-35-1 HCAPLUS

CN alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 253683-36-2 HCAPLUS

.alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O(phenylmethyl)-.qQCI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

253683-37-3 HCAPLUS RN 4-Octen-1-ol, 8-(phenylmethoxy)-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 253683-38-4 HCAPLUS 4-Octen-1-ol, 8-(2-methoxyethoxy)-, (4Z)- (9CI) (CA INDEX NAME) CN

Double bond geometry as shown.

RE.CNT 50

RE

- (1) Adinolfi, M; Tetrahedron Lett 1996, V37, P5007 HCAPLUS (2) Adinolfi, M; Tetrahedron Lett 1998, V39, P1953 HCAPLUS
- (6) Caruthers, M; Science 1985, V230, P281 HCAPLUS
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L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2000 ACS

AN 1999:334357 HCAPLUS

DN 131:73867

TI Synthesis and Use of Glycosyl Phosphates as Glycosyl Donors

AU Plante, Obadiah J.; Andrade, Rodrigo B.; Seeberger, Peter

CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA. 02139, USA

MA, 02139, USA SO Org. Lett. (1999), 1(2), 211-214 CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

ABB Differentially protected glycosyl phosphates prepd. by a straightforward synthesis from glycal precursors are used as powerful glycosyl donors. Activation of .beta.-glycosyl phosphates by TMSOTf at -78 .degree.C achieves the selective formation of .beta.-glycosidic linkages in excellent yields with complete stereoselectivity. Reaction with thiols results in the conversion of glycosyl phosphates into thioglycosides in nearly quant. yield. An orthogonal coupling strategy using glycosyl phosphate donors and thioethyl glycoside acceptors allows for the rapid synthesis of a trisaccharide.

IT 75-08-1, Ethanethiol 4064-06-6 40246-30-8 55628-54-1 80040-79-5 114117-12-3 145852-76-2 196703-95-4 226919-70-6

226919-85-3

RL: RCT (Reactant)

(prepn. and use of glycosyl phosphates as glycosyl donors)

RN 75-08-1 HCAPLUS

CN Ethanethiol (8CI, 9CI) (CA INDEX NAME)

 $_{\mathrm{H_3C-CH_2-SH}}$

Absolute stereochemistry.

RN 40246-30-8 HCAPLUS CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA

.beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl) (961) (6)

RN 55628-54-1 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 80040-79-5 HCAPLUS

CN D-arabino-Hex-5-enitol, 2,6-anhydro-5-deoxy-1,3,4-tris-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 114117-12-3 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-4-O[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-galactopyranosyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 145852-76-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

RN 196703-95-4 HCAPLUS
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-0-(phenylmethyl)-6-0[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 226919-70-6 HCAPLUS
CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-0-(phenylmethyl)-1-thio-,
2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 226919-85-3 HCAPLUS
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-6-0-[(1,1-dimethylethyl)dimethylsilyl]-, bis(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 226919-63-7P 226919-66-OP 226919-69-3P

226919-73-9P 226919-79-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and use of glycosyl phosphates as glycosyl donors)

(PREP (Preparation)

RN 226919-63-7 HCAPLUS

(Deta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry. Rotation (-).

Absolute stereochemistry. Rotation (-).

RN 226919-69-3 HCAPLUS
CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-,
dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-73-9 HCAPLUS

.beta.-D-Mannopyranoside, ethyl 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-3,4-bis-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-79-5 HCAPLUS
CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Absolute stereochemistry. Rotation (-).

RN 201210-64-2 HCAPLUS
CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-,
2,2-dimethylpropanoate (9CI) (CA INDEX NAME)
SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry.

RN 219122-26-6 HCAPLUS
CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (ÇA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 226919-62-6 HCAPLUS
CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(phenylmethyl)
phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 226919-64-8 HCAPLUS
CN .beta.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).